

**FIG. 1**  
(Prior Art)

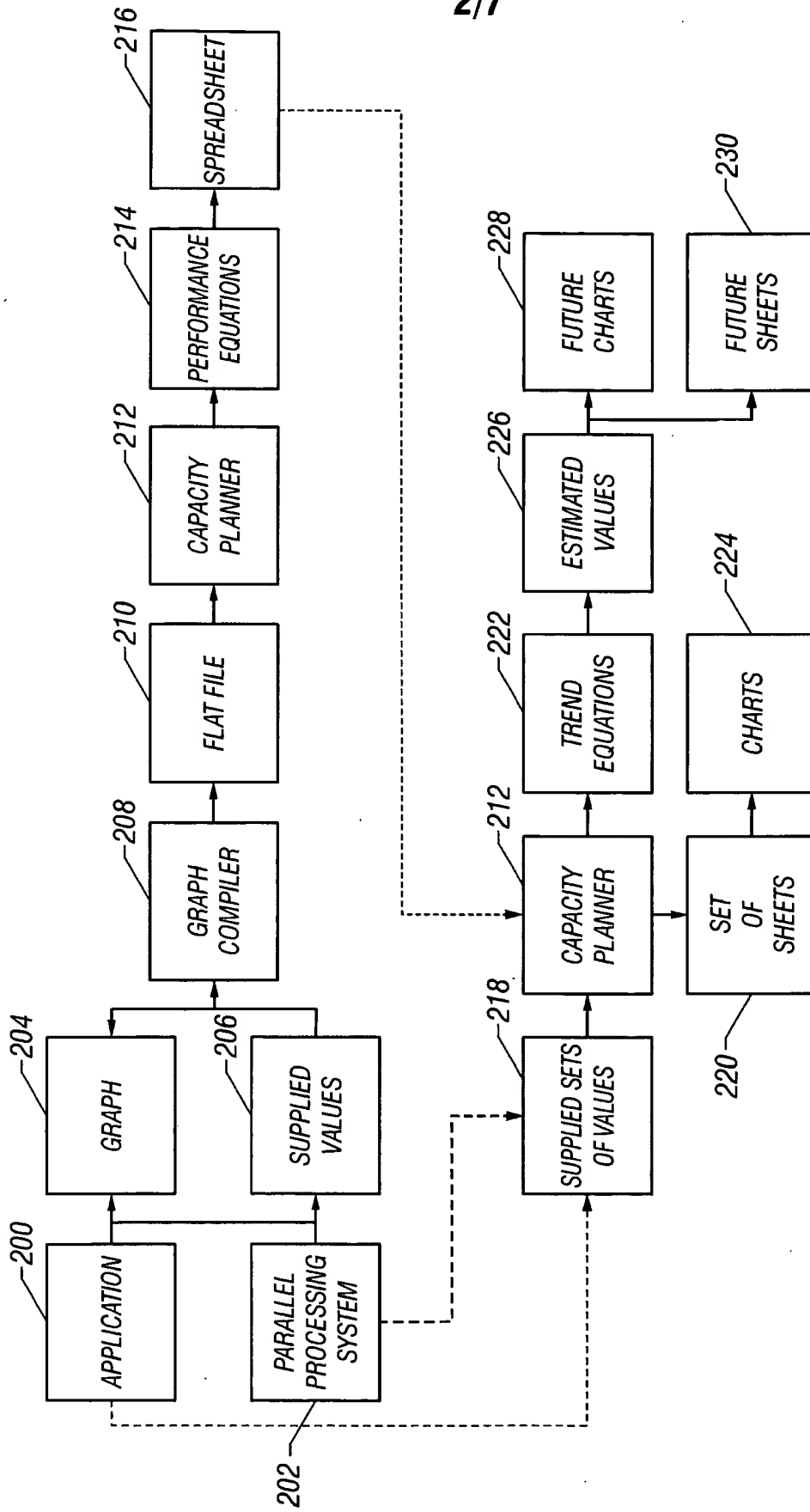


FIG. 2

*TH*

*TI, SpreadsheetPath=c: | My Documents | marshall | capdemo | scoring.xls*

*TI, Time=hour*

*TI, SheetTitle=Scoring*

*CH*

*CT, Disk I/O, 3.0*

*CT, Hash, 10*

*CT, Send, 2*

*CT, Sort, 0.5*

*CT, Merge and transform, 2*

*CT, Aggregate, 2*

*CT, Score, 2*

*GH*

*GT, Sort detail data, 68, 94, Sort=1, Disk I/O=1, CPUTIME=12500*

*GT, Sort customer data, .3, 82, Sort=1, Disk I/O=1, CPUTIME=300*

*GT, Merge and transform, 68, 169, Merge and transform=1, CPUTIME=5700*

*GT, Aggregate, 68, 169, Aggregate=1, CPUTIME=6300*

*GT, Score, .3, 94, Disk I/O=1, Score=1, CPUTIME=20*

*FH*

**FIG. 3**

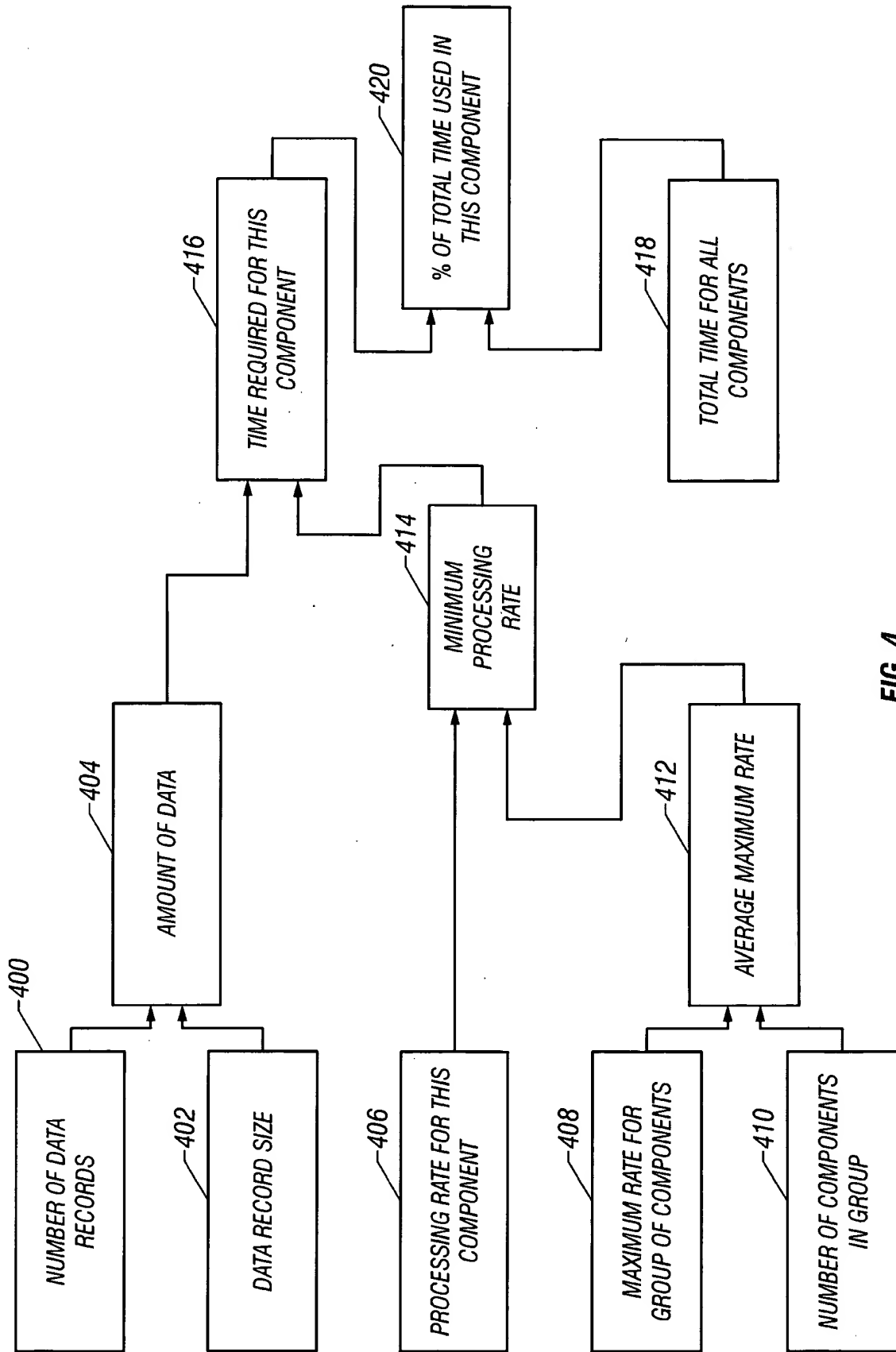


FIG. 4

## SCORING

500	502	504	506	508	510	512	514	516	518	520
PERFORMANCE MODEL	COMP RATE (MB/SEC)	PARTS	# RECORDS (MILLIONS)	RECORD SIZE (BYTES)	TOTAL SIZE (GB)	DISK I/O (GB)	NET I/O (GB)	TOTAL DATA (GB)	TOTAL TIME (HOURS)	PERCENT OF TOTAL TIME
SORT DETAIL DATA	0.5	2	68.0	94.0	6.4	6.4		6.4	3.6	14.9%
SORT CUSTOMER DATA	0.5	2	0.3	82.0	0.0	0.0		0.0	0.0	0.1%
MERGE AND TRANSFORM	0.3	2	68.0	169.0	11.5			11.5	10.6	44.7%
AGGREGATE	0.4	1	68.0	169.0	11.5			11.5	9.1	38.3%
SCORE	0.8	1	0.3	94.0	0.0	0.0		0.0	0.0	0.0%
DISK I/O	4.0					6.4			0.4	1.9%
NETWORK I/O	5.0						0.0		0.0	0.0%
TOTAL CPU HOURS	522	23.8								

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## ELAPSED TIME

524	526	528	530	532	534	536	538	540	542	544
PERFORMANCE MODEL	COMP RATE (MB/SEC)	PARTS	# RECORDS (MILLIONS)	RECORD SIZE (BYTES)	TOTAL SIZE (GB)	DISK I/O (GB)	NET I/O (GB)	TOTAL DATA (GB)	TOTAL TIME (HOURS)	PERCENT OF TOTAL TIME
SORT DETAIL DATA	0.5	2	68.0	94.0	6.4	3.2		3.2	1.8	10.8%
SORT CUSTOMER DATA	0.5	2	0.3	82.0	0.0	0.0		0.0	0.0	0.0%
MERGE AND TRANSFORM	0.3	2	68.0	169.0	11.5			5.7	5.3	32.3%
AGGREGATE	0.4	1	68.0	169.0	11.5			11.5	9.1	55.4%
SCORE	0.8	1	0.3	94.0	0.0	0.0		0.0	0.0	0.1%
DISK I/O	4.0					3.2			0.2	1.4%
NETWORK I/O	5.0						0.0		0.0	0.0%
ESTIMATED ELAPSED HOURS	546	16.5								
WALL CLOCK TIME (HOURS)	548	16.9								
% CPU BUSY	550	97.4%								

FIG. 5

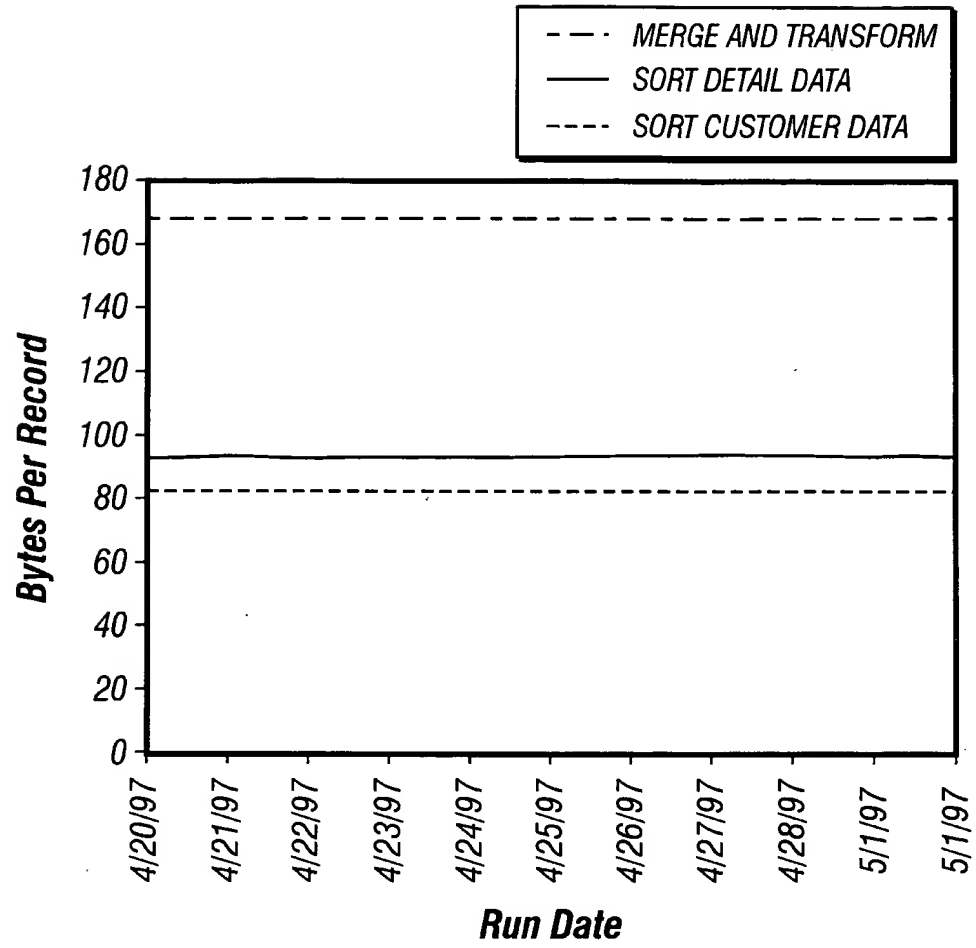


FIG. 6

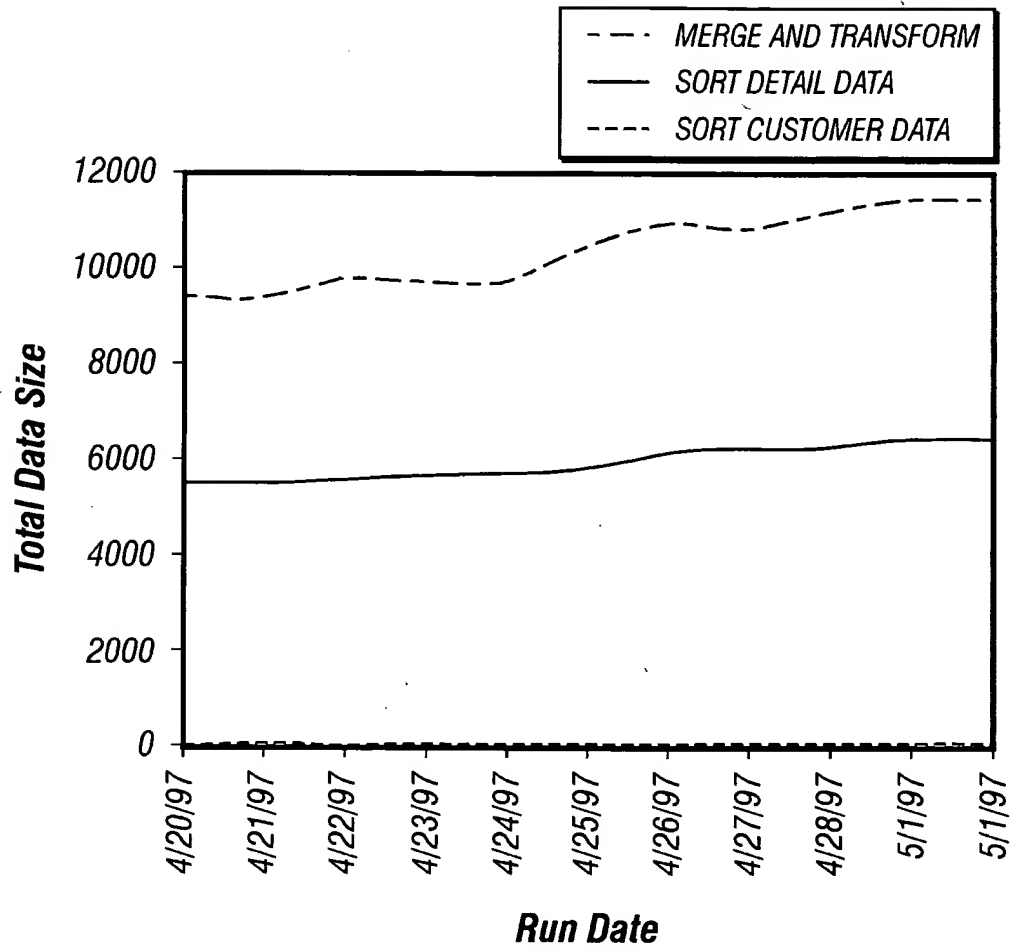


FIG. 7